Argentina and LACs current account reversals. Domestic causes, global shocks and contagion.

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Figure 1. Current Account to GDP ratio and Investment to GDP ratio. Argentina 1979 – 2004

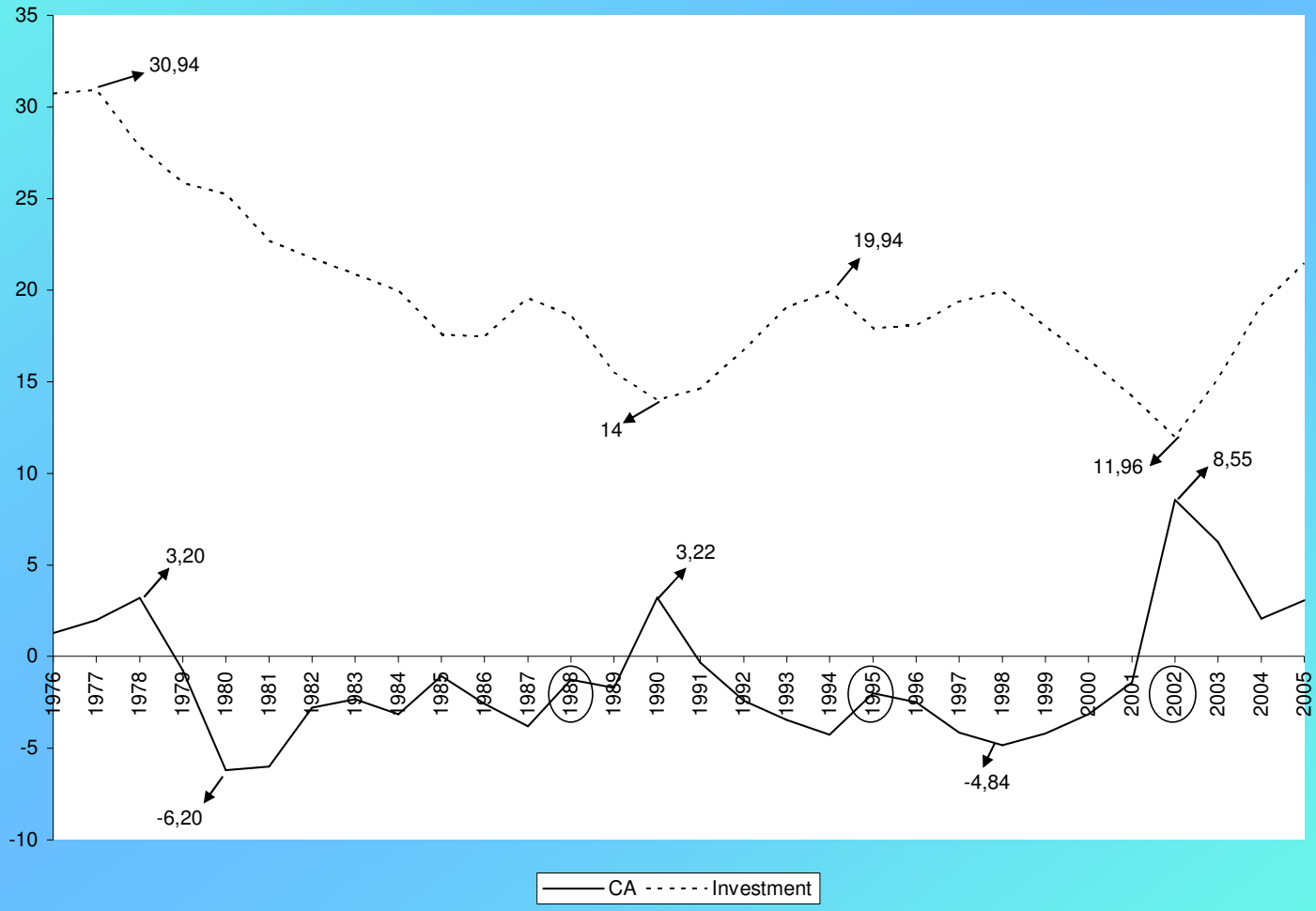


Table 1: Issues in reversals of the current account research

Causes (economic model). Under the solvency approach: perceived impaired capacity to pay.

Domestic causes: internal and external transfer. Hypothesis: the export gap and loss of solvency.

External causes: transmission of world shocks. Hypothesis: world prices and total savings, contagion and regional effects, shifts in direction of flows.

→

Reversals
Concept, definition and statistical properties: sharp, large and sustained.

→

Effects of large, sudden and permanent CA adjustments on economic variables

Investment, income distribution, poverty, economic growth.

Determinants of vulnerability (probability and magnitude of costs): openness, institutions.,

→

Policy implications
Net benefits of external borrowing.
Dealing with external shocks and uncertainty
Degree of control of capital movements.

Table 2.
Reversals of the Current Account in Argentina 1935- 2002.
Absolute magnitude of improvement in the CA ≥ 2.48%, 3%, 5%*

$\Delta CA\%$	Year of Reversal								
	1939	1950	1953	1963	1973	1976	1988	1995	2002
-2.48	-4.51	-2.67	-6.64	-4.07	-3.02	-3.61	-2.82	-2.51	-7.67
-3	**X**		**X**	**X**	**X**	**X**			**X**
-5			**X**						**X**

Source, Díaz Cafferata, Kohn and Resk, 2005.
* -2.48 is the simple average of CA/GDP in Argentina in the deficit years.

Changing the criterion of magnitude affects the numbers of reversals, but not the dates.

Table 3. Latin American Countries 1979 - 2004. Current Account Reversals*

Country	Hon	Bol	Jam	Cos	Peru	Gua	Chi	Ecu	Rdom	Hai	Para	Pana	Mex	Col	Bra	Arg	Sal	Uru	Tri	Vene
Av deficit	6,18	6,70	6,54	5,40	4,98	4,24	4,49	4,91	3,91	3,38	5,36	5,46	3,27	3,61	2,85	2,93	2,46	2,38	5,36	5,29
Standar deviation	2,72	4,18	4,34	3,82	3,81	1,67	3,82	4,23	3,58	2,57	4,84	6,21	2,85	3,33	2,30	3,42	2,37	2,13	6,56	6,97
% GDP	0,294	0,415	0,425	0,698	2,801	0,918	3,142	0,873	0,840	0,252	0,378	0,547	27,949	4,229	33,343	14,431	0,628	1,051	0,450	6,337
Mean ca	-6,18	-6,00	-5,64	-5,40	-4,39	-4,24	-4,06	-3,92	-3,15	-3,08	-3,07	-2,59	-2,39	-1,95	-1,87	-1,70	-1,64	-1,45	0,27	3,70
1979																				
1980		A																	A	
1981									a, c									a, c		
1982		a, c		a, b, c			A			A		a, b, c				A		B		
1983								a, b, c					a, b, c				A			a c
1984					b, c				b, c					a, b, c	a, b, c				A	
1985																			C	
1986	b, c		a, b, c							b, c				a, b, c			a, b, c	a, c		
1987							b, c					a, b, c	A							
1988		b, c						A	A							C		C	C	
1989					a, b, c						a, b, c									a, b, c
1990								b, c						B		A			a, b, c	
1991																				
1992			C					A												
1993																				
1994		a, c							C											a, c
1995									B				a, b, c							
1996																				
1997	b, c																			
1998											C									
1999					b, c		a, b, c	a, b						a, b, c					A	A
2000																			b, c	
2001		B										b, c								
2002											a, b, c				b, c	a, c		a, b, c		
2003									a, c											
2004																				

Changing not only the criterion of magnitude, but also asking the change in the CA to be sharp and persistent, alters the dates of observed reversals

Analytical implications of CAR identification criteria

Creates a problem to stablish causality

$CARt = f(var\ tj\ ...)$

Different statistical criteria of CAR are associated to different economic phenomena (e.g. Liquidity or solvency)

Latin American CARs: a regional phenomenon?

Comparison between Argentina and the average of other LACs

Correlation of CA between Argentina and each of the other LACs

Figure 3. 1979 – 2004. Current Account to GDP ratio. Agentina and simple average of the rest of LACs.

GDP and Current account series in current dollars.
Source of data: World Bank.

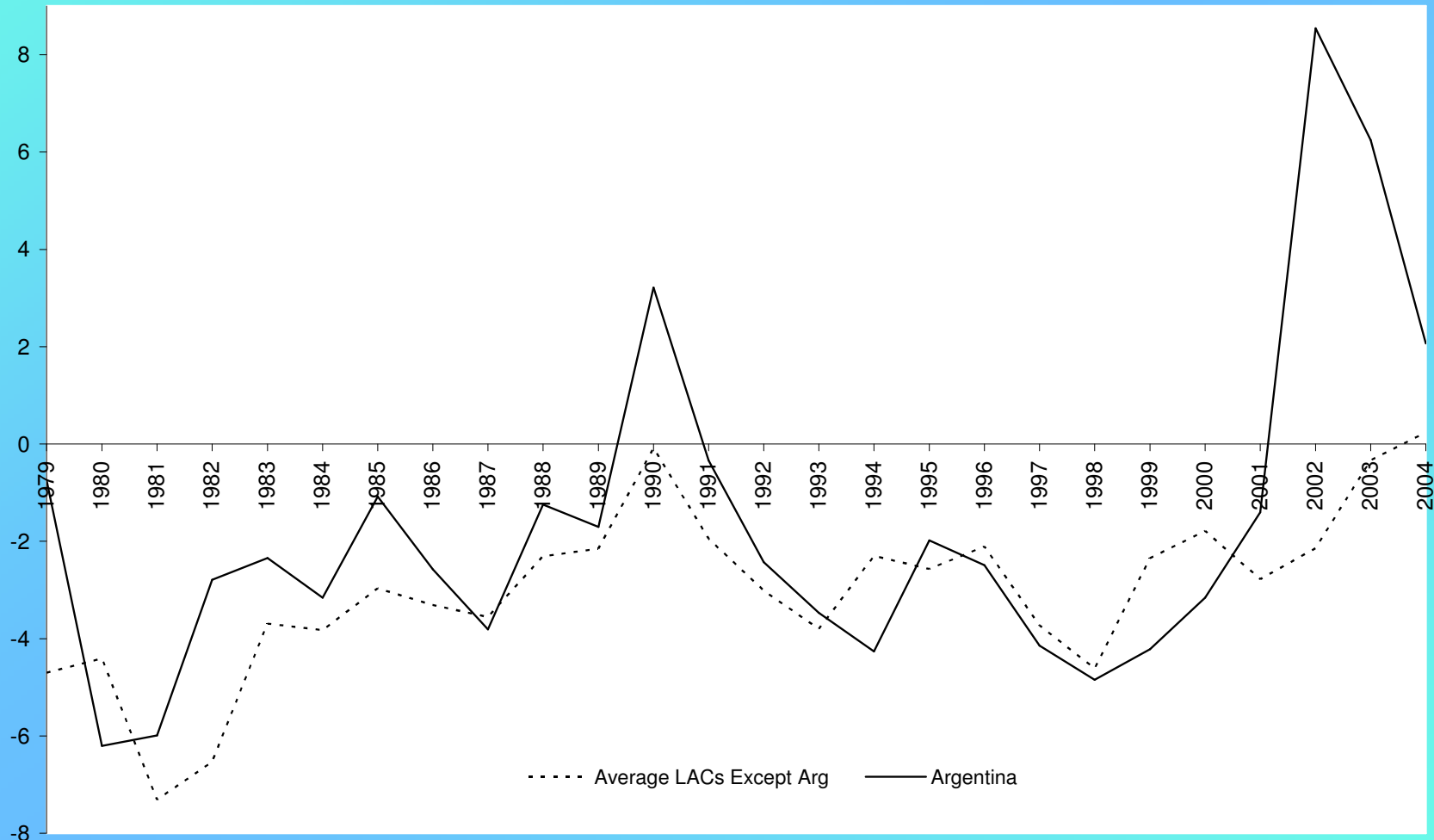
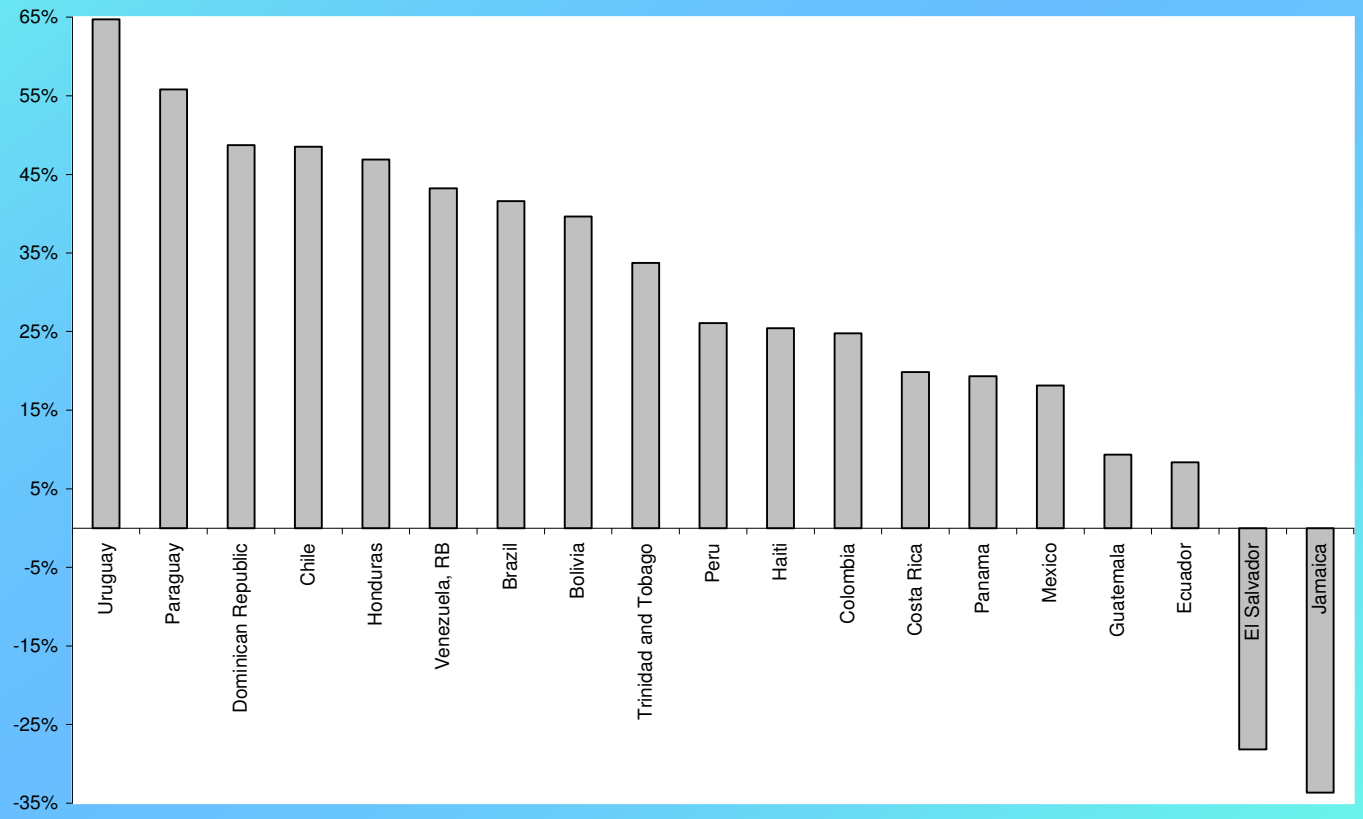


Figure 4. 1979 – 2004. Current Account to GDP ratio. Correlation coefficient between Argentina and the rest of LACs.

GDP and Current account series in current dollars.
Source of data: World Bank.



Statistical model

$$P(y_{it}=1|\mathbf{x}_i,c_i)=P(y_{it}=1|\mathbf{x}_{it},c_i)=\Phi(\mathbf{x}_{it}\boldsymbol{\beta}+c_i),\ t=1,...,T\ ,\ i=1,...,N$$

where:

$y_{i1},\ldots,y_{iT}$ are independent conditional on $(\mathbf{x}_i,c_i)$

$c_i|\mathbf{x}_i \sim Normal(0,\sigma_c^2)$

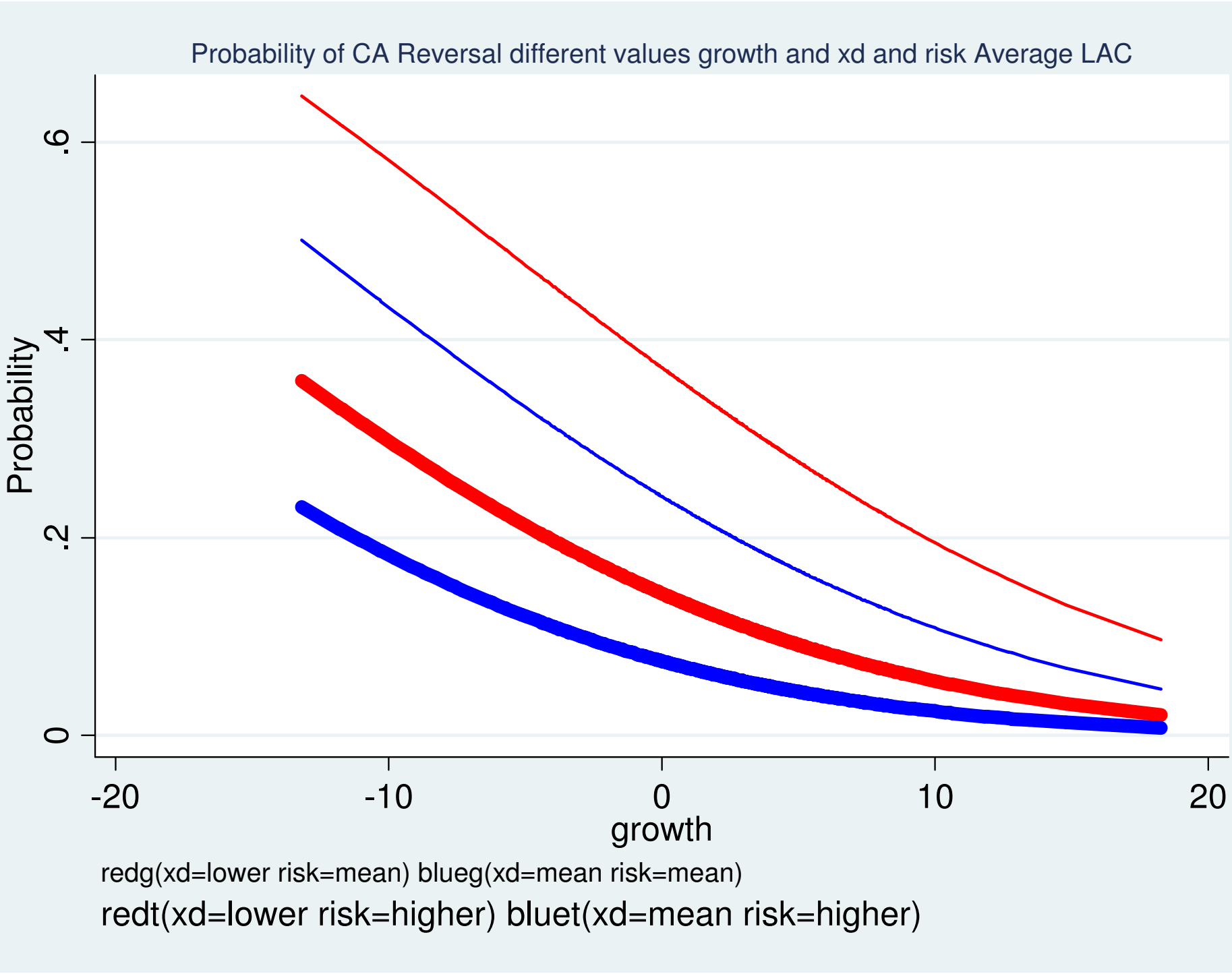
Variable	Description	Source
Current account	Current Account balance (% of GDP). Lagged one period.	Global Development Indicators (GDI). World Bank.
Current account Reversal	Reduction in current account deficit. Constructed on the basis of (i) Díaz Cafferata et al 2007; (ii) Milesi-Ferretti and Razin 1998, and (iii) Edwards 2007.	Based on GDI current account data.
$growth$	GDP growth (annual %)	Global Development Indicators (GDI). World Bank.
$debt(-1)$	Total Debt (EDT)/GNI (%). Lagged one period	Global Development Finance (GDF). World Bank.
$res(-1)$	Reserves (RES)/Total debt (EDT) (%)	Global Development Finance (GDF). World Bank.
$short(-1)$	Short-term debt/Total debt (EDT) (%)	Global Development Finance (GDF). World Bank.

$fdi(-1)$	Foreign direct investment, net inflows (% of GDP)	Global Development Indicators (GDI). World Bank.
$dinrate$	Annual change in terms of trade.	International Monetary Fund.
con	Contagion index for country defined as number of total reversal occurred in year less the reversal in country scaled to total reversal of the sample	Based on GDI current account data.
dti	Annual change in the international interest rate.	Global Development Indicators (GDI). World Bank.
$x(-1)$	Exports of goods, services and income (XGS) (US$)	Global Development Indicators (GDI). World Bank.
$m(-1)$	Imports of goods, services and income (MGS) (US$)	Global Development Indicators (GDI). World Bank.
$drriesgo$	Change in Regional country risk premium	Rodriguez (1986), Ávila (2001) y Mecon

Selected Latin American countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haití, Honduras, Jamaica, México, Panamá, Paraguay, Perú, Trinidad y Tobago, Uruguay y Venezuela.

Probability of a Current Account Reversal. Random-effects probit regression. 1979-2004.

Dependent variable	Eq. (1)	Eq. (2)	Eq. (3)
growth	**-0.088** (0.000)	**-0.064** (0.003)	**-0.070** (0.000)
fdi(− 1)	**0.022** (0.630)	**0.058** (0.124)	**0.039** (0.278)
res (− 1)	**0.004** (0.181)	**-0.015** (0.048)	**-0.004** (0.402)
short (− 1)	**0.015** (0.214)	**0.014** (0.218)	**0.014** (0.190)
debt(− 1)	**0.005** (0.217)	**0.001** (0.758)	**0.002** (0.513)
dinrate	**0.000** (0.924)	**-0.005** (0.126)	**0.001** (0.534)
con	**0.027** (0.285)	**0.042** (0.082)	**0.026** (0.378)
x(− 1)	**-0.113** (0.000)	**-0.046** (0.044)	**-0.075** (0.005)
m(− 1)	**0.114** (0.000)	**0.046** (0.044)	**0.077** (0.004)
dti	**0.021** (0.024)	**0.024** (0.010)	**0.025** (0.004)
σ_c^2	**0.499**	**0.063**	**0.228**
ρ^*	**0.199** (0.049)	**0.004** (0.173)	**0.049** (0.272)
Number of observations	**520**	**520**	**520**
Number of groups	**20**	**20**	**20**


Probability of CA Reversal different values growth and xd and risk Average LAC
Probability
0
.2
.4
.6
-20
-10
0
10
20
growth
redg(xd=lower risk=mean) blueg(xd=mean risk=mean)
redt(xd=lower risk=higher) bluet(xd=mean risk=higher)